Upgrade Products for Agilent 7500 Series ICP-MS Instruments

Selection Guide

Contents

Introduction 2

Mainframe Upgrades

Octopole Reaction System (ORS) Upgrades 2

- G3275A ORS upgrade from G3151A (7500a), G3152A (7500i) and G3153A (7500s) 4
- G3276A ORS upgrade from G3151B (7500a) and G3153B (7500s) 4
- G3277A ORS upgrade from G3155A (7500c) 5
- G3278A ORS upgrade from G3155B (7500c) 5
- G3279A ORS upgrade from G3271A (7500a) 5

Adding a 3rd Cell Gas Line

- G3264A 3rd cell gas line (low flow) 6
- G3267A 3rd cell gas line (high flow) 7

Adding an Optional Gas Line

- G3145B Optional gas line 7

Adding a 2nd Peristaltic Pump

- G3146A 2nd peristaltic pump (Sample pump) 7
- G3148A Integrated Sample Introduction System (ISIS) 8

Adding an Autosampler

- G3160A Integrated Autosampler (I-AS) 9

ChemStation Upgrades

Upgrading to the latest version 10

ChemStation Add-ons

- G3143A Intelligent Sequencing software 12
- G1824C Plasma chromatographic software 12
- G3263A User access control pack 12

Software Licenses

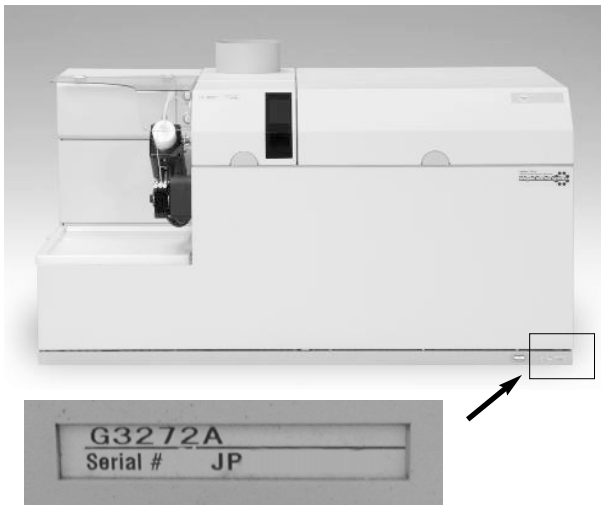
- G1825E Agilent 7500 ChemStation software license 12

GP-IB to LAN SmartCard Conversion 13

Agilent Technologies

Introduction

This upgrade guide is intended for users of the Agilent 7500 Series ICP-MS who require additional functionality from their instrument. The compatibility of each upgrade is shown under each section. First, check your mainframe product number (G3xxxx) and serial number, which can be found below the front panel on the right side of the instrument.



Mainframe Upgrades

Octopole Reaction System (ORS) Upgrades

Compared to non-cell ICP-MS, the Agilent ORS removes polyatomic interferences, allowing better quantification in complex matrices, a wider elemental coverage, and freedom to use hydrochloric, sulfuric or phosphoric acids in sample preparation. ORS based systems are easier to use than conventional ICP-MS since no correction equations are used. These ORS upgrades enable any non-ORS 7500 Series mainframe to be retrofitted on-site and also allow 7500c systems to be converted to the 7500ce style on-axis cell, giving increased sensitivity.

Ordering steps:

Step-1: To ensure all the necessary items are ordered, it is essential to obtain the serial number of the mainframe to be upgraded. First use the mainframe product number G3xxxx to identify the Base ORS Upgrade Product Number in Table 1 below.

Step-2: Choose the option # to select the type of lens required:

- ce-lens (#001) for all routine, non-semicon applications
- cs-lens (#002) for semicon applications or where ultimate sensitivity is required (and for single shot laser applications)

Step-3: Using the mainframe serial # (JPxxxxxxxxx or DExxxxxxxxx), check which other options are required, based on the age of the mainframe. Older 7500 mainframes may require a new quadrupole analyzer, gate valve, and communications interface.

Table 1. Base Product Numbers for ORS Upgrades

Existing Instrument	Base Product Number for ORS Upgrade (ce-lens type)	Base Product Number for ORS Upgrade (cs-lens type)
G3151A (7500a) G3152A (7500i) G3153A (7500s)	G3275A #001	G3275A #002
G3151B (7500a) G3153B (7500s)	G3276A #001	G3276A #002
G3155A (7500c)	G3277A #001	G3277A #002
G3155B (7500c)	G3278A #001	G3278A #002
G3271A (7500a)	G3279A #001	G3279A #002

Important note – PC Compatibility:

The ORS upgrade kits include the latest revision of the ICP-MS ChemStation software (B.03.xx). B.03.xx only runs on Windows 2000 or Windows XP (not included). Rev.B.03.xx has minimum PC hardware requirements as summarized in Table 2. Some PC's originally supplied with older 7500 mainframes will not meet these requirements, and a new ICP-MS PC hardware upgrade bundle (G3150A #321) is available for this situation. The G3150A #321 contains a new PC (with Windows XP operating system), monitor and printer, but no ICP-MS ChemStation software license, since the existing license (with the ChemStation PC upgrade) is used.

Table 2. Minimum PC Requirements

PC	HP Kayak VL400 7/800 or later PC models shipped from Agilent
System memory	128MB of RAM or greater, 512MB is recommended for Windows XP
Hard disk	10.0 GB or greater
Operating system	Windows 2000 + Service Pack 4, or Windows XP Professional + Service Pack 2
Internet Explorer	Internet Explorer 6 + Service Pack 1
Printer	(English) HP LaserJet 4000/4050/2200 (Japanese) Canon LBP 430, Brother HL-1240/1440/5040 or later models supplied with ChemStation PC
GPIB SmartCard	82341C, 82350A or 82350B (GPIB SmartCard is not needed for later 7500 mainframes with LAN SmartCard interface for data transfer)

Important note: cell gas purity:

High quality He and H_2 gas supplies are also critical for optimum performance of the ORS. Table 3 gives a recommended gas purification kit.

Table 3. Gas Purification Kit

Product no.	Product description	Options	
G3269A	Gas Purification kit for ORS	8710-1709	Tubing cutter
		5182-9706	2 Position Base plate
		5182-9705	Triple filter cartridge x2
		G3270-65035	1/8" Pre-cleaned stainless steel tubing, 6 m, fittings
		5182-0821	Wall mount bracket
		5182-3423	Spare O-ring, 8/pk, 4 each of 2 sizes

Gas Regulators

Customer to supply – in North America these regulators are available from Agilent.
(Note: Parts below have fittings suitable for use in North America only)

Gas regulators – brass body

5183-4642	H_2 regulator for collision cell – with s/steel diaphragm
5183-4644	He regulator for collision cell – with s/steel diaphragm

Gas regulators – s/steel body – highest available specification

0101-1399	H_2 regulator for collision cell – with s/steel diaphragm
0101-1398	He regulator for collision cell – with s/steel diaphragm
0101-1400	Ar regulator for ICP-MS

Both types of regulator are suitable for ORS use.

ORS Upgrades

Product description	Product no.	Note
Upgrade from G3151A (7500a), G3152A (7500i), and G3153A (7500s)		
Comprises ORS conversion parts (including turbomolecular pump), ChemStation software and manuals.	G3275A	Must also order #001 or #002 Must order #100 and #200 if not present on instrument Check instrument serial number and order #210, #220 and #230 if required Must order 5185-5850 checkout solution (except Japan)
Ni interface/ce-lens/MicroMist	#001	Ni sampling cone, Ni skimmer, ce-lens assembly with stainless skimmer base and MicroMist nebulizer
Pt interface/cs-lens/Micro Flow	#002	Pt sampling cone, Pt skimmer, cs-lens assembly with brass skimmer base and Micro Flow 100 nebulizer
Add rear duct	#100	Must order this option if not present on instrument
Add ShieldTorch	#200	Must order this option if not present on instrument
Replace interface with LAN type	#210	Must order if the instrument serial number is earlier than XXxxxxxx472
Replace quadrupole with new Eagle type quadrupole	#220	Must order if the instrument serial number is earlier than XXxxxxxx294
Replace gate valve assemby	#230	Must order if the instrument serial number is earlier than XXxxxxxx737

Product description	Product no.	Note
Upgrade from G3151B (7500a), G3153B (7500s)		
Comprises ORS conversion parts (including turbomolecular pump), ChemStation software and manuals.	G3276A	Must also order #001 or #002 Must order #100 and #200 if not present on instrument Check instrument serial number and order #210, #220 and #230 if required Must order 5185-5850 checkout solution (except Japan)
Ni interface/ce-lens/MicroMist	#001	Ni sampling cone, Ni skimmer, ce-lens assembly with stainless skimmer base and MicroMist nebulizer
Pt interface/cs-lens/Micro Flow	#002	Pt sampling cone, Pt skimmer, cs-lens assembly with brass skimmer base and Micro Flow 100 nebulizer
Add rear duct	#100	Must order this option if not present on instrument
Add ShieldTorch	#200	Must order this option if not present on instrument
Replace interface with LAN type	#210	Must order if the instrument serial number is earlier than XXxxxxxx472
Replace quadrupole with new Eagle type quadrupole	#220	Must order if the instrument serial number is earlier than XXxxxxxx294
Replace gate valve assemby	#230	Must order if the instrument serial number is earlier than XXxxxxxx737

ORS Upgrades (continued)

Product description	Product no.	Note
ORS Upgrade from G3155A (7500c)		
Comprises ORS conversion parts, ChemStation software and manuals.	G3277A	Must also order #001 or #002 Check instrument serial number and order #210, #220 and #230 if required Must order 5185-5850 checkout solution (except Japan)
Ni interface/ce-lens/MicroMist	#001	Ni sampling cone, Ni skimmer, ce-lens assembly with stainless skimmer base and MicroMist nebulizer
Pt interface/cs-lens/Micro Flow	#002	Pt sampling cone, Pt skimmer, cs-lens assembly with brass skimmer base and Micro Flow 100 nebulizer
Replace interface with LAN type	#210	Must order if the instrument serial number is earlier than XXxxxxxx472
Replace quadrupole with new Eagle type quadrupole	#220	Must order if the instrument serial number is earlier than XXxxxxxx294
Replace gate valve assemby	#230	Must order if the instrument serial number is earlier than XXxxxxxx737

Product description	Product no.	Note
ORS Upgrade from G3155B (7500c)		
Comprises ORS conversion parts, ChemStation software and manuals.	G3278A	Must also order #001 or #002 Must order 5185-5850 checkout solution (except Japan)
Ni interface/ce-lens/MicroMist	#001	Ni sampling cone, Ni skimmer, ce-lens assemby with stainless skimmer base and MicroMist nebulizer
Pt interface/cs-lens/Micro Flow	#002	Pt sampling cone, Pt skimmer, cs-lens assemby with brass skimmer base and Micro Flow 100 nebulizer

Product description	Product no.	Note
ORS Upgrade from G3271A (7500a)		
Comprises ORS conversion parts, ChemStation software and manuals.	G3279A	Must also order #001 or #002 Must order #100 if not present on instrument Must order 5185-5850 checkout solution (except Japan)
Ni interface/ce-lens/MicroMist	#001	Ni sampling cone, Ni skimmer, ce-lens assembly with stainless skimmer base and MicroMist nebulizer
Pt interface/cs-lens/Micro Flow	#002	Pt sampling cone, Pt skimmer, cs-lens assembly with brass skimmer base and Micro Flow 100 nebulizer
Add rear duct	#100	Must order this option if not present on instrument

Adding a 3rd Cell Gas Line

The 7500 Octopole Reaction System (ORS) systems are shipped as standard with two cell gas lines, which are used for helium and hydrogen cell gases. Agilent offers the option to add a 3rd cell gas line as an upgrade. The ORS 3rd cell gas line option is available in 2 types – Low Flow (max. flow 1 mL/min: designed for Xe) and High Flow (max. flow 10 mL/min: designed for 10% NH_3 in He mix). These options expand the capabilities of the ORS in research, semiconductor and pioneering applications. Note that only one of the 3rd cell gas line options can be fitted to a system.

G3264A Low flow type (max. flow: 1 mL/min) for use with Xe cell gas

Benefit: Improves the BEC and DL for ^{32}S (heavily interfered by O_2) to the low ppb level.

Process: Xe gas works as an efficient reaction gas to remove the O_2 polyatomic ion. The interference removal process is a rapid charge transfer reaction between O_2^+ and Xe, which removes the O_2^+ ion.

Application: Low ppb level sulfur analysis

G3267A High flow type (max. flow: 10 mL/min) for use with 10%NH_3/He cell gas

Benefit: Allows ultratrace measurement of vanadium (mass 51) in HCl by attenuation of ClO interference (also mass 51)

Process: ClO interference is reduced by reaction with NH_3, which is more efficient than He, H_2 or cool plasma.

Application: ppt level measurement of V in high purity HCl

3rd Cell Gas Line Kit (low flow)

Product description	Product no.	Note
Applicable mainframes:		
G3272A (7500ce), G3273A (7500cs), G3155A/B (7500c), G3162A/B (7500c)		
For use with Xe cell gas Full scale: 1 mL/min (adjusted for Xenon) Contains: a mass flow controller (calibrated for Xe gas), pipework and connectors	G3264A	Must order with option (#001 or #002). Select the option for the existing mainframe. For a G3155A that has previously had an ORS upgrade fitted, the 3rd cell gas line option for the G3155A mainframe (#001) must still be selected - do not select the #002 option for an ORS mainframe. G3264A and G3267A cannot be used together. The reaction cell gas supply and a regulator must be located within 3 meters (10 feet) of the instrument, and preferably in the laboratory. The reaction cell gas tubing must be 1/8" stainless steel, and previously unused (Order Agilent part no. G3270-65035). 99.999% purity Xe gas is required.
For G3155A/B (7500c) and G3162A/B (7500cs)	#001	
For G3272A (7500ce), G3273A (7500cs)	#002	

3rd Cell Gas Line Kit (high flow)

Product description	Product no.	Note
Applicable mainframes: **G3272A (7500ce), G3273A (7500cs)**	G3267A	G3264A (7500a) and G3267A cannot be used together.
For use with 10% NH_3/He cell gas		The reaction cell gas supply and a regulator must be located within 3 meters (10 feet) of the instrument, and preferably in the laboratory.
Full scale: Max. 10 mL/min		The reaction cell gas tubing must be 1/8" stainless steel, and previously unused (Order Agilent part no. G3270-65035)
Contains: A mass flow controller (calibrated for 10% NH_3/He mix), pipework and connectors. Also sealing O-ring and cell body are replaced with NH_3 resistant materials.		99.999% purity is required for 10% NH_3/He cell gas
		ChemStation software: Requires rev. B.03.02 or later. Check rev. B.03.02 PC and mainframe requirements

Adding On Optional Gas Line

Product description	Product no.	Note
Applicable mainframes: **G3271A (7500a), G3272A (7500ce), G3151A/B (7500a) G3152A (7500i)**		
The optional gas line is used to add O_2 to the carrier gas flow when organics are analyzed, or when an organic mobile phase is used in LC-ICP-MS applications.	G3145B	Also requires organic solvent introduction kit (G1833-65038) for organic solvent analysis. Note: The optional gas line is fitted as standard to G3273A (7500cs) mainframes.
Full scale: 1 L/min. Includes installation		

Adding a 2nd Peristaltic Pump and ISIS

Product description	Product no.	Note
Applicable mainframes: **All 7500 mainframes except G3152A (7500i) - ISIS is already fitted as standard to G3152A.**		
The 2nd peristaltic pump enables constant flow nebulization to improved sample throughput since it eliminates stabilization time after high speed pumping.	G3146A	Recommend order ISIS tubing kit (G3138-65006) to set up. Note: Cannot be used with ISIS since the 2nd peristaltic pump is mounted in the same position. The Pre-emptive Rinse and Intelligent Rinse software functions (version B.03.02 or later can be used with the 2nd peristaltic pump but not currently with ISIS).
Additional 3-channel peristaltic pump (integrated to 7500 mainframe)		

Integrated Sample Introduction System (ISIS)

Product description	Product no.	Note
Applicable mainframes: **G3271A (7500a), G3272A (7500ce), G3273A (7500cs), G3151A/B (7500a), G3153A/B (7500i), G3155A/B (7500c), G3162A/B (7500cs)**		
The Integrated Sample Introduction System (ISIS) is a very flexible sample introduction system. See ISIS technical documentation for full details.	G3148A	Must select a pump unit option (#011, #012 or #013) The Intelligent Sequencing software (G3143A) is also required for full, real time auto dilution capability. Note: Cannot be used with 2nd peristaltic pump option since it is mounted in the same position. The Pre-emptive Rinse and Intelligent Rinse software functions (version B.03.02 or later can be used with the 2nd peristaltic pump but not currently with ISIS).
Pump unit (no valves) ISIS pump unit, fitted with two 10-roller peristaltic pumps.	#011	Enables high sample throughput and auto dilution (with Intelligent Sequencing).
Pump unit (1 Valve) ISIS Pump unit, fitted with two 10-roller peristaltic pumps and one 6-port injection valve.	#012	Enables high sample throughput, auto dilution (with Intelligent Sequencing) and discrete sampling.
Pump unit (2 Valves) ISIS Pump unit, fitted with two 10-roller peristaltic pumps and two 6-port injection valves.	#013	Enables high sample throughput, auto dilution (with Intelligent Sequencing), discrete sampling, and advanced applications such as matrix removal and low-pressure chromatography.
ISIS Spares Kit (G3138-65006) Complete set of spare sample lines and connectors plus connectors, fittings, mixing coil, block, adaptors, clamps and tray.	#100	
Hydride generation accessory (G3138-65005) ISIS accessory that includes reaction vessel with gas/liquid separator, connectors, bracket, mixer and tubing.	#200	Enables hydride generation analysis with the ISIS. Must be ordered with G3148A and option #011, #012, or #013 Gives extreme sensitivity for hydride forming elements such as As, Se.
Preconfigured ISIS tubing kits (G3138-65023)	#300	For high sample throughput
Preconfigured ISIS tubing kits (G3138-65024)	#301	For auto dilution
Preconfigured ISIS tubing kits (G3138-65025) These preconfigured tubing kits save set up time.	#302	For discrete sampling

Adding an I-AS Autosampler

Product description	Product no.	Notes
Integrated Autosampler (I-AS)		
The Agilent I-AS random access autosampler with cover for ultratrace analysis. It features inert, pumped rinse port. Compatible with Intelligent Sequencing software (optional), ISIS (optional) and with either the Agilent 4500 or 7500 ICP-MS. Customer installable.	G3160A	MUST select ICP-MS mainframe option: #001 (7500) or #002 (4500) and at least one tray type: #100-104 Note: A drain tank >2 L is recommended, but not included. When using the I-AS with ISIS, order also the PFA I-AS sampling probe (id 0.8 mm) (G3160-65324). The higher flow resistance of the standard 0.3-mm id I-AS probe can cause signal instability when used with the ISIS peristaltic pumps.
For Agilent 7500 Bracket to attach the I-AS to the 7500 sample tray.	**#001**	**Must select this option for use with Agilent 7500**
For Agilent 4500	#002	Must select this option for use with Agilent 4500. Agilent 4500 Windows NT/2000/XP version ChemStation is required if the autosampler is to be used with a 4500 ICP-MS.
Type A Tray - 89 position (G3160-65300)	#100	Tray holds 89 × 6-mL vials. Pack of 200 × 6-mL vials (polypropylene) is included. Note: not recommended for ISIS autodilution due to low volume vials.
Type B Tray - 53 position (G3160-65301)	#101	Tray holds 53 × 18-mL vials. Pack of 55 × 18-mL vials (polypropylene) is included.
Type C Tray - 18 position (G3160-65302)	#102	Tray holds 18 × 50-mL vials. Pack of 20 × 50-mL vials (polypropylene) is included.
Type D Tray - 89 position (G3160-65308)	#103	Tray holds 79 × 1.5-mL (or 2-mL) vials and 10 × 18-mL vials. Pack of 200 × 2-mL vials (polyethylene) and 10 × 18-mL vials (polypropylene) are included.
Type E Tray - 89 position (G3160-65309)	#104	Tray holds 79 × 6-mL vials and 10 × 18-mL vials. Pack of 200 × 6-mL vials (polypropylene) and 10 × 18-mL vials (polypropylene) are included.
1.5-mL vials (PFA), 10 pcs (G3160-65317)	#203	For use with Tray D - option #103
2-Year unit exchange warranty	#W68	Next day exchange service. (Standard warranty is 1-year on-site).
6-mL vials (polypropylene), 200 pieces	G3160-65303	For Tray A and Tray E
18-mL vials (polypropylene), 55 pieces	G3160-65304	For Tray B, Tray D, Tray E
50-mL vials (polypropylene), 20 pieces	G3160-65305	For Tray C
1.5-mL vials (PFA), 10 pieces	G3160-65317	For Tray D
2.0-mL vials (polyethylene), 200 pieces	G3160-65315	For Tray D
Probe (id 0.3 mm)	G3160-65306	Standard probe for the I-AS
Probe (id 0.8 mm)	G3160-65324	For use with ISIS
100-mL bottle, 3 pieces	G3160-65307	
Tubing holder	G3160-65325	For use with micro flow nebulizer (without a sampling probe) and 2.0-mL vials.

ChemStation and PC Upgrades

Main Features of ChemStation Version B.03.xx

There were many significant improvements in version B.03.01 compared with the earlier version B.02, including improved tuning screen, calibration table, semiquant, Intelligent Rinse, data handling and diagnostic tools. For full details see Agilent Technical Note: 5989-1715EN.

The current revision (Rev. B.03.02) allows Agilent GC/LC ChemStation (32bit) and ICP-MS ChemStation to co-reside and co-execute on the same PC. LC and GC methods can be run from the ICP-MS sequence table - making speciation measurement easier and more powerful. Another new feature is "Pre-emptive rinsing". This new function moves the autosampler probe to the rinse station before data acquisition ends. The result is shortened rinsing time and improved sample throughput.

New Features in Rev. B.03.02 (compared to B.03.01)

- Coexistence of ICP-MS ChemStation with LC or GC ChemStation
  - Only one PC required for ICP-MS and chromatography ChemStation.
  - AIA format ICP-MS data file generation (chromatography data format) – for export to GC/LC ChemStation.
  - Simplifies speciation studies
- Pre-emptive rinse
  - Shorter rinsing time – rinse starts before data acquisition ends
  - Improved sample throughput
- Supports new options/peripherals
  - Supports 3rd cell gas line options
  - Controls metal-free IC pump (Metrohm 818) for IC-ICP-MS solution

Ordering Information

G3149B Upgrade software for Windows XP/2000

Applicable revision: All revisions before B.03.01

Upgrade to revisions B.03.02 (or later) ChemStation

Includes CD-ROM and manual

- Requires, but does not include, Windows 2000/XP operating system
- Customer installable
- Does not include installation and familiarization
- For Agilent 7500 Series only - 4500 Series not supported
- For rev.B.03.01 users, a free download is available from the Agilent website

Notes:

The minimum PC hardware requirements (Table 4) must be met. Some PC's originally supplied with older 7500 mainframe will not meet these requirements, in these cases, a new ICP-MS PC hardware bundle (G3150A #321) is available. The G3150A #321 contains a new PC (with Windows XP), monitor and printer, but without an ICP-MS ChemStation software license, since the existing license is used.

Table 4. Minimum PC Requirements

PC	HP Kayak VL400 7/800 or later PC models shipped from Agilent
System memory	128MB of RAM or greater, 512MB is recommended for Windows XP
Hard disk	10.0 GB or greater
Operating system	Windows 2000 + Service Pack 4, or Windows XP Professional + Service Pack 2
Internet Explorer	Internet Explorer 6 + Service Pack 1
Printer	(English) HP LaserJet 4000/4050/2200 (Japanese) Canon LBP 430, Brother HL-1240/1440/5040 or later models supplied with ChemStation PC
GPIB SmartCard	82341C, 82350A or 82350B (GPIB SmartCard is not needed for later 7500 mainframes with LAN SmartCard interface for data transfer)

Compatibility with GC and LC ChemStations for GC-ICP-MS and LC-ICP-MS

The GC/LC ChemStation suites which can co-reside with the B.03.02 ICP-MS ChemStation are as follows:

- G2070BA 32 bit GC ChemStation software (for 1 GC)
- G2071BA 32 bit GC ChemStation software (additional GC)
- G2170BA 32bit HPLC 2D ChemStation software (for 1 LC)
- G2171BA 32bit HPLC 2D ChemStation software (additional LC)
- G2710BA 32 bit LC/MSD ChemStation software

Notes:

- A switching hub (G2402A HP ProCurve Networking Switch 408 or similar) is required to connect a GC or LC with the 7500 ICP-MS mainframes, where the ICP-MS mainframe has a LAN SmartCard. This is because the PC's on board LAN connection is taken up by the ICP-MS. It is not recommended to fit a second LAN interface into the PC.
- All 7500 mainframes are supported
- The 16 bit GC/LC ChemStation suites are not supported

Other ChemStation Software Options

Product description	Product no.	Notes
Intelligent Sequencing software Comprehensive QA/QC software Installation and familiarization are not included	G3143A	Required for QA/QC functionality including automatic rerun on QC failure when used with an autosampler. Also required with ISIS if autodilution functionality is required.
Plasma chromatographic software For chromatographic data analysis.	G1824C	For the 7500 ICP-MS ChemStation Customer installable. User training can be ordered separately if required.
User access control pack Installation and familiarization are not included Multi-level user access Audit trail functions include	G3263A	Add-on functionality for ICP-MS ChemStation software providing multilevel user access and audit trail capability to record user logon/logoff event information. Three levels of user access with administrator-controlled permission and separate logon for each level. Ability to change users during automated sequencing or other long operations. Supports operating system lock function to prevent unauthorized access while current user is away. Record of user(s) logon/logoff to operating system (supported OS function) and ChemStation logon. Log of user name, instrument name, serial number, tune file name and time stamp stored with all data files and included in all reports. Only compatible with Rev.B.02.00 or later ICP-MS ChemStation version and is compatible with Windows 2000 and Windows XP only.

Additional User Licenses

Product description	Product no.	Notes
Agilent 7500 ChemStation software license	G1825E	License to allow the Agilent 7500 ChemStation software to be installed on up to three standalone PCs for use offline. License and manual only - media not included. Windows operating system is NOT included.

GP-IB to LAN SmartCard Conversion

A LAN SmartCard offers easier connectivity and compatibility with current and future PCs. The LAN SmartCard is installed in the 7500 mainframe, replacing the GP-IB SmartCard.

Product description	Product no.	Notes
SmartCard III Bracket kit	G1833-65137	To upgrade from GP-IB to LAN, the following items are required.
LAN SmartCard III+	G1833-66064	ChemStation must be rev. B.03.02 (or later). With a LAN SmartCard, a switching hub (G2402A HP ProCurve Networking Switch 408 or similar) is required to connect the ChemStation to a local network. With a LAN SmartCard, a switching hub (G2402A HP ProCurve Networking Switch 408 or similar) is required to connect both the GC/LC and 7500 ICP-MS mainframes, if the ICP-MS is to be used with a GC or LC.
Installation is not included – 2 hours of install time must be also purchased. Contact your local Agilent representative		

For More Information

For more information on our products and services, visit our Web site at www.agilent.com/chem.

Agilent shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Information, descriptions, and specifications in this publication are subject to change without notice.

© Agilent Technologies, Inc. 2006

Printed in the USA
June 1, 2006
5989-5172EN

Agilent Technologies